

Department of Development and Environmental Services (DDES)

900 Oakesdale Avenue Southwest • Renton, Washington 98057-5212 • 206-296-6600 • TTY 206-296-7217

Fire System Permits

DDES Customer
Information Bulletin #**13****• FREQUENTLY ASKED QUESTIONS •**

*Visit the DDES Web site at
www.kingcounty.gov/permits
for more information*

King County DDES has created customer information bulletins to inform the general public about the effect of codes and regulations on their projects. These bulletins are not intended to be complete statements of all laws and rules and should not be used as substitutes for them. If conflicts and questions arise, current codes and regulations are final authority. Because the codes and regulations may be revised or amended at any time, consult King County staff to be sure you understand all requirements before beginning work. It is the applicant's responsibility to ensure that the project meets all requirements of applicable codes and regulations.

For alternate formats, call 206-296-6600.

How Do Customers Apply For a Fire System Permit?

Fire system permits are required for fire sprinklers, extinguishing systems, and fire alarm systems. Permits are also required for watermain extensions, fire hydrants, underground sprinkler supply lines and high-pile stock and storage permits in unincorporated King County.

This bulletin describes the submittal requirements for these major types of fire system permits. Fire system permits are governed by the International Fire and Building Codes and must meet fire and life safety requirements. If customers have questions about these permits, the applicable codes, submittal requirements, or fees charged, they may call DDES Fire Protection Engineers at 206-296-6675. All applicable fees are paid at the time of application and only complete applications will be accepted.

Permits may be applied for by either of the following methods:

1. Applications may be mailed to the King County Department of Development and Environmental Services (DDES) located at 900 Oakesdale Avenue Southwest, Renton, Washington 98057-5212.
2. Applications may be dropped off at the DDES Permit Center at the above address. For driving directions, simply log onto the DDES Web site at www.kingcounty.gov/permits. No appointment or waiting is required. To drop off an application, customers check in at the reception desk on the first floor of the building and a representative from the Permit Center will provide assistance. Applications will be accepted between 8:30 a.m. and 4:30 p.m. Monday through Friday.

Materials required for a permit application is as follows:

1. Affidavit of Application for a Fire System Permit;
2. Completed Fee Sheet; and
3. Three (3) sets of plans and applicable manufacturer's data sheet (provided by applicant).

Forms are available via the DDES Web site at www.kingcounty.gov/permits, the DDES Customer Information Line at 206-296-6600 and in the DDES Permit Center in Renton, WA.

Fire Sprinkler Systems (Residential, Multi-Family, and Commercial)

When applying for a Fire Sprinkler System Permit, the submittal packages must include a Fire System Permit Application/Affidavit Form, a fee sheet, a cover sheet and three sets of plans.

- A. Cover sheets should include the following information:
1. Owner or developer's name, address, telephone and fax number;
 2. Agent's name, address, and telephone number;
 3. A statement of the scope of work that this permit is intended to cover;
 4. Summary of the number of zones, systems, and sprinkler heads;
 5. If the system is for a particular building or tenant space in a complex, the tenant's name and location information (For example, space number, building number, or floor number), application numbers (shell permits, tenant improvement permits, fire system permits, or mechanical permits);
 6. The Property Tax Account Numbers for all parcels involved;
 7. Legal description of the property;
 8. The contractor's name and current Registration Numbers; and
 9. The fire and water districts serving the proposed site.
- B. The three sets of plans must include the following information:
1. Site plans including the following:
 - The tenant space or building where the work is to be done;
 - Outside hookups to utilities, including the underground sprinkler supply line;
 2. Floor plans, including the following:
 - The location of risers, piping, and heads (label whether or not they are new or existing);
 - Show all room designations (examples: office, paint storage, spray booth, stairwells, bedrooms);
 3. Complete riser details;
 4. Details and legends for the hangars and sprinklers, including sway bracing;
 5. Cross-sections showing trusses framing, ceilings, and location of sprinklers;
 6. Hydraulic calculations (as required);
 7. If this is an addition to an existing system, show existing risers, piping, and heads in enough detail to allow DDES to determine the adequacy of the existing system;
 8. For a single-family residence served by a well, a holding tank and a pump may be necessary. Call a Fire Protection Engineer for additional information at 206-296-6675;
 9. If sprinklers are being installed within an existing structure, provide verification that the structure can support the weight of the proposed system; and
 10. Plans and hydraulic calculations shall be stamped by a person holding a current Sprinkler Certificate of Competency issued by the State of Washington.

Extinguishing Systems

When applying for a fixed extinguishing system, submittal packages must include a Fire System Permit Application/Affidavit form, a fee sheet, a cover sheet and three sets of plans.

- A. Cover sheets must include the following information:
1. Owner or developer's name, address, telephone and fax number;
 2. Agent's name, address, and telephone number;
 3. A statement of the scope of work that this permit is intended to cover;
 4. Whether the system is for a particular building or tenant space in a complex, the tenant's name, and location information (for example, space number, building number, or floor number);

5. Application numbers for related permits (shell permits, tenant improvement permits, fire system permits, or mechanical permits). It is particularly important that customers provide the application number for the hood or duct system that this fixed system will protect;
 6. The Property Tax Account Numbers for all parcels involved;
 7. The legal description of the property;
 8. The contractor's name and current contractor's Registration Number; and
 9. The fire district serving the proposed site.
- B. Plan sets must include the following information:
1. Scaled and dimensioned plans for the following:
 - Hood and duct system (plan views);
 - Cooking appliances (plan views);
 - Combined hood, duct, and appliances (elevations); and
 2. Information and details on the system, to include the following:
 - The make, model, and size of the system. Specify the location and describe the nozzles so that the adequacy of the system can be determined;
 - Information pertaining to the location and function of detection devices, operating devices, auxiliary equipment, and electrical equipment, if any; and
 - No approvals will be granted for a fixed fire extinguishing system to be installed in a hood and duct system until the installation of the hood and duct is approved by the Mechanical Plans Examination Engineer in DDES.

Fire Alarm Systems

When applying for Fire Alarm System Permits, submittal packages must include a Fire System Permit Application/Affidavit form, a fee sheet, a cover sheet, three sets of plans and three copies of cut sheets and batter calculations.

- A. Cover sheets must include the following information:
1. Owner and developer's name, address, telephone and fax number;
 2. Agent's name, address, and telephone number;
 3. A statement of the scope of work this permit is intended to cover;
 4. A summary statement giving the number of devices (alarms, horns, and detectors) and the number of risers;
 5. If the system is for a particular building or tenant space in a complex, the tenant's name and location;
 6. Information (for example, space number, building number, or floor number);
 7. Application numbers (shell permits, tenant improvement permits, fire system permits, or mechanical permits) related to this application;
 8. The Property Tax Account Numbers for all parcels involved;
 9. The legal description of the property;
 10. The contractor's name and current contractor's Registration Number; and
 11. The fire district serving the proposed site.
- B. Plan sets must include the following information:
1. Site plans that clearly note the tenant space or building in which the work is to be done.
 2. Floor plans showing the following:
 - The alarm/detection system (do not include electrical drawings, outlets, of fixtures).
 - All new and existing equipment clearly shown and labeled;
 - All connections between device (both existing and new); (point to point wiring)
 - Device quantities, shown by total and zone.

- C. Copies of cut sheets attached to each set of plans highlighting specs and model numbers. All devices must be listed and/or approved by a nationally recognized testing agency.

Watermain Extensions, Fire Hydrants, or Underground Sprinkler Supply Lines

When applying for watermain extensions, fire hydrants, or underground sprinkler supply lines, submittal packages must include a Fire System Permit Application/Affidavit form, a fee sheet, a cover sheet and three sets of plans.

- A. Cover sheets must include the following information:
1. Owner or developer's name, address, telephone and fax number;
 2. The agent's name, address, and telephone number;
 3. A statement of the scope of work that this permit would cover;
 4. Whether the system is for a particular building or plat and the related application numbers;
 5. The Property Tax Account Numbers for all parcels involved or served by the proposal;
 6. The legal description of the property;
 7. The contractor's name and Registration Number; and
 8. The fire and water districts serving the proposed site.
- B. Plan sets must include the following information:
1. Site plans that match the legal description(s). They must clearly show the following:
 - The location of existing and proposed hydrants, and
 - All watermains and their sizing.Details and specifications of piping, fire hydrants, valves, connections, and blocking.
- C. Plans and hydraulic calculations shall be stamped by a person holding a current Sprinkler Certificate of Competency issued by the State of Washington.

High-Pile Stock and Storage Permits

A High-Pile Stock and Storage Permit is required for any building used for storage of combustible materials in excess of 500 square feet in closely packed piles, combustible materials on pallets, in racks, or on shelves where the top of storage is greater than 12 feet in height above the finished floor. When applying for High-Pile Stock and/or Storage Permits, submittal packages must include a Fire System Permit Application/Affidavit form, a fee sheet, a cover sheet and three sets of plans.

- A. Cover sheets must include the following information:
1. Owner or developer's name, address, telephone and fax number;
 2. The agent's name, address, and telephone number;
 3. A statement of the scope of work this permit is intended to cover. This statement must include a description of the storage commodity (such as description of items, method of packaging) with sufficient detail to allow the classification of contents;
 4. The original shell application or Permit Number and any related application numbers (tenant improvement, fire system, and mechanical permits);
 5. The Property Tax Account Numbers for all parcels involved;
 6. The legal description of the property;
 7. The contractor's name and Registration Number; and
 8. The fire and water districts serving the proposed site.
- B. Plan sets must include the following information:
1. Site plans to match the legal description, including the locations of tenants and high-pile stock storage;
 2. Floor plan showing the dimensions and locations of stockpiles, aisles, and access doors;

3. Roof plan showing the location of approved smoke vents and draft curtains (if applicable).

NOTE: Smoke vents must be approved or listed by a nationally recognized testing agency. Include the following information in the roof plan:

- Construction details of draft curtains and smoke vents. (Submit written certification, along with calculations, by a licensed Structural Engineer that the roof structure will not be impaired and can support the addition of smoke vents and draft curtains along with all other supported equipment.)
 - Catalog cuts of smoke vents, releasing devices, etc.;
4. Building section showing height of building and maximum usable storage height;
 5. Construction details of racks:
The following additional information must be submitted for rack storage:
 - Structural calculations,
 - Seismic design calculations, and
 - Connection details, etc.
 6. Method of storage on racks (for example, wood pallets, open shelves, solid shelves);
 7. Location and dimensions of flue spaces; and
 8. Depth of racks.

Other Bulletins and Telephone Numbers That May Be Helpful

Bulletin 1	Building and Development Permit Phone Numbers
Bulletin 7	Mobile Home Permits
Bulletin 8	Commercial and Multi-Family Building Permits
Bulletin 9	Obtaining a Residential Building Permit
Bulletin 12	Residential Building Permit Process
Bulletin 21	Critical Areas Review
Bulletin 28	Clearing and Grading Permits
Bulletin 39	Private Residential Sprinkler Systems

These and other DDES bulletins are available via the department Web site at www.kingcounty.gov/permits.

206-296-6600	DDES Permit Center
206-296-6797	DDES Permit Application Appointment Desk
206-296-6630	DDES Building Inspection Staff

Fire Marshal Division	206-296-6675
Annual Fire Inspections	206-296-6675
Arson Hotline (Toll-free)	1-800-55-ARSON
Fire Investigation Unit	206-296-6675
Fire Protection Engineering	
Engineering Plan Review	206-296-6675
Fire Flow Analysis	206-296-6675
Hazardous Materials Permits	206-296-6675
New Construction/Fire Inspection	1-888-546-7728
Fire Inspection General Information	206-296-6630



Be sure to visit our Web site at:
www.kingcounty.gov/permits

King County complies with the Americans with Disabilities Act (ADA). If you require an accommodation to attend a meeting (two weeks' notice) or require this information in Braille, audiocassette, or large print, please call 206-296-6600 or TTY 206-296-7217.